

## New York School Cosmic Particle Telescope Summer Institute, August 9-23, New York University

July 24, 2002

Dear Participants,

August 9 is fast approaching and we're very much looking forward to meeting you all.

The orientation and classes will be in NYU's Meyer Hall, 4 Washington Place, located one block north of West 4th Street near Broadway. Rooms will be posted. If you have a question or problem, go to the Physics Department office, room 424, or call (2112) 998-7700.

The orientation meeting will be held from 4:30-6 pm on Friday, August 9, 2002. This is compulsory for all participants. If you cannot attend due to circumstances beyond your control, contact Wesley Pitts (718) 523-0960. The plan of the orientation is as follows (times approximate):

4:30-4:40	Registration
4:40-5:10	Introduce faculty; describe the program; organization
5:10-6:00	Break into groups to see the labs; refreshments; meet other participants

We hope that every student will be able to bring one or both parents or an older family member to the orientation. By joining us for the orientation they will see the labs and understand our objectives. Who knows -- eventually they may want to participate in the NYSCPT project themselves in some way! If possible, please RSVP by email to [oh@physics.nyu.edu](mailto:oh@physics.nyu.edu), letting us know who will accompany you. You may also phone her at (212) 992-8780.

Enclosed you will find the preliminary Course Schedule for the Summer Institute and some excerpts from "College Physics" by Sears, Zemansky and Young, 7th ed. This is a popular textbook for pre-med physics classes. It does not use calculus and is clear and accessible, so even students who have not taken Physics or Chemistry should be able to follow it. We strongly encourage everyone to read it, discuss it with their team members if possible, and make notes about things they don't understand for us to discuss during the Summer Institute. This will help us start from a common foundation.

Other background reading we recommend:

- Cronin, Gaisser, and Swordy, "Cosmic Rays at the Energy Frontier", Scientific American, Jan 1997 -- copy enclosed.
- \*\*\* Martin Rees, "Our Cosmic Habitat", Princeton Univ. Press, 2002 (\$15.75)
- Gordon Kane, "The Particle Garden", Helix Books, Perseus Press 1996(\$11.20)
- \*\*\* Gerard t'Hooft, "In Search of the Ultimate Building Blocks",

Cambridge University Press, 1996 (\$13.30) [A little bit more difficult but extremely good and still for the layman]

Some on-line references are:

- [www.cosmic-ray.org/background.html](http://www.cosmic-ray.org/background.html)
- [www2.slac.stanford.edu/vvc/cosmicrays/default.htm](http://www2.slac.stanford.edu/vvc/cosmicrays/default.htm)

Thanks to a generous donation from Wolfram Research, we will be able to install Mathematica on all the computers. Early in the program there will be an introduction to using Mathematica. We anticipate that teachers may borrow a copy of The Mathematica Book prior to that if they wish; those who do should contact Jennifer Oh at [oh@physics.nyu.edu](mailto:oh@physics.nyu.edu) or (212) 992-8780 to arrange to pick it up.

This Summer Institute and the NYSPT is supported by the National Science Foundation (NSF PHY-134007 and NSF PHY-9983836), New York University, Columbia University, CUNY's Gateway Institute for Pre-College Education, and Wolfram Research.

Additional information is given on the Course Schedule.

Best regards,  
Glennys Farrar  
Britt Reichborn-Kjennerud  
Reshmi Mukherjee  
Wesley Pitts  
Stefan Westerhoff